Claims

1.   A method of associating look-up table addresses with MAC addresses, the method including for successive MAC addresses A_0:

using A_0 to generate $y+1$ look-up table addresses H_0, H_1, H_2, ..., H_y, where y is an integer greater than or equal to one; and

according to at least one criterion associating the address A_0 with a selected one of the addresses H_0, H_1, H_2, ..., H_y.

2.   A method according to claim 1 wherein the criterion is that A_0 is associated with H_n where n is the smallest integer in the range 0 to y such that there is presently no MAC address associated with the address H_n.

3.   A method according to claim 1 wherein the criterion is that A_0 is associated with H_n where n is the smallest integer in the range 0 to y such that the number of MAC addresses associated with the address H_n is less than a predetermined integer.

4.   A method according to claim 1, claim 2 or claim 3 wherein the addresses H_1 to H_y are generated successively upon it being found that the preceding H_n does not meet a criterion.

5.   A method according to claim 4 wherein the value of y is predetermined, whereby the maximum number of addresses H_0, H_1, H_2, ..., H_y which are generated is no more than a predetermined number, even if none of these addresses meets the criterion.

6.   A method according to any preceding claim wherein each of the addresses H_1, H_2, ..., H_y is obtained from the address A_0 by first forming a respective string A_n having the same number of bits as A_0, and then applying the algorithm by which H_0 is obtained from A_0.

7.   A method according to claim 6 wherein each A_n is obtained by modulating a string S_n obtained by a selection from A_0 with a respective set of Walsh codes.

8.   A switch including a memory for defining a look-up table having a
plurality of addresses and a processor for associating MAC addresses with
addresses of the look-up table,

        the processor being arranged to use each MAC address A_0 to generate
5   y+1 look-up table addresses H_0, H_1, H_2, ..., H_y for y an integer greater than or
equal to one, and according to at least one criterion to associate the address
A_0 with a selected one of the addresses H_0, H_1, H_2, ..., H_y.